

TABLE 16. Doctorate recipients, by sex and subfield of study: 2012

Subfield of study	Total ^a	Male	Female	% female
All fields	51,008	27,390	23,562	46.2
Life sciences	12,045	5,331	6,698	55.6
Agricultural sciences and natural resources	1,256	699	554	44.1
Agricultural economics	88	57	31	35.2
Agronomy, horticulture science, plant breeding, plant pathology, plant sciences-other	292	171	121	41.4
Animal breeding, animal nutrition, poultry science	85	51	34	40.0
Animal science, other	75	34	39	52.0
Environmental science	186	95	91	48.9
Fishing and fisheries sciences/management	51	35	16	31.4
Food science, food technology-other	142	58	83	58.5
Forest biology, forest management, wood science, forestry sciences-other	99	57	42	42.4
Natural resources/conservation	98	55	43	43.9
Soil chemistry, soil sciences-other	52	29	23	44.2
Wildlife/range management	39	21	18	46.2
Agricultural sciences, aggregated	49	36	13	26.5
Biological, biomedical sciences	8,440	3,936	4,494	53.2
Anatomy, developmental biology	196	89	107	54.6
Bacteriology, parasitology	52	23	29	55.8
Biochemistry	846	436	409	48.3
Bioinformatics	146	104	41	28.1
Biomedical sciences	366	159	205	56.0
Biometrics and biostatistics	174	82	91	52.3
Biophysics (biology)	194	122	72	37.1
Botany, plant pathology, plant physiology	153	67	85	55.6
Cancer biology	382	159	223	58.4
Cell/cellular biology and histology	373	176	197	52.8
Computational biology	94	71	23	24.5
Ecology	417	188	229	54.9
Endocrinology, human/animal pathology	120	54	65	54.2
Entomology	120	67	53	44.2
Environmental toxicology, toxicology	146	73	73	50.0
Evolutionary biology	203	105	98	48.3
Genetics-human/animal, plant genetics	378	171	207	54.8
Immunology	455	208	247	54.3
Marine biology and biological oceanography	100	42	58	58.0
Microbiology	454	177	277	61.0
Molecular biology	624	285	338	54.2
Neurosciences and neurobiology	1,055	483	571	54.1
Nutrition sciences	183	38	145	79.2
Pharmacology, human and animal	307	134	173	56.4
Physiology, human and animal	256	130	126	49.2
Structural biology	57	30	27	47.4
Virology	162	67	95	58.6
Zoology	51	20	31	60.8
Biology/biomedical sciences, general	228	99	128	56.1
Biotechnology, biology/biomedical sciences-other	148	77	71	48.0
Health sciences	2,349	696	1,650	70.2
Environmental health, public health	418	109	308	73.7
Epidemiology	365	109	256	70.1
Health policy analysis	41	14	27	65.9
Health systems/services administration	49	15	34	69.4
Kinesiology/exercise physiology	228	134	94	41.2
Medicinal/pharmaceutical sciences	295	153	141	47.8
Nursing science	553	36	517	93.5
Rehabilitation/therapeutic services	81	35	46	56.8

TABLE 16. Doctorate recipients, by sex and subfield of study: 2012

Subfield of study	Total ^a	Male	Female	% female
Speech-language pathology and audiology	119	22	97	81.5
Health sciences, aggregated	200	69	130	65.0
Physical sciences	8,952	6,393	2,551	28.5
Astronomy	275	190	85	30.9
Astronomy	88	55	33	37.5
Astrophysics	176	128	48	27.3
Astronomy, other	11	7	4	36.4
Atmospheric science and meteorology	205	125	80	39.0
Atmospheric physics, meteorology	69	47	22	31.9
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	136	78	58	42.6
Chemistry	2,418	1,520	897	37.1
Analytical chemistry	372	192	180	48.4
Inorganic chemistry	307	199	108	35.2
Organic chemistry	664	456	208	31.3
Physical chemistry	362	235	127	35.1
Polymer chemistry	125	90	34	27.2
Theoretical chemistry	78	56	22	28.2
Chemistry, general	292	178	114	39.0
Chemistry, other	218	114	104	47.7
Computer and information sciences	1,845	1,465	380	20.6
Computer science	1,484	1,219	265	17.9
Information science and systems	173	115	58	33.5
Robotics	50	46	4	8.0
Computer and information science, other	138	85	53	38.4
Geological and earth sciences	462	266	196	42.4
Geochemistry, mineralogy	87	42	45	51.7
Geology	112	71	41	36.6
Geomorphology, geological sciences-general, geological sciences-other	111	58	53	47.7
Geophysics and seismology	95	65	30	31.6
Paleontology, stratigraphy	57	30	27	47.4
Mathematics	1,702	1,218	481	28.3
Algebra	149	112	37	24.8
Analysis and functional analysis	133	113	20	15.0
Applied mathematics, computing theory	474	332	140	29.5
Geometry/geometric analysis	111	97	14	12.6
Logic, topology/foundations	89	68	21	23.6
Number theory	63	55	8	12.7
Operations research, mathematics/statistics-general, mathematics/statistics-other	318	212	105	33.0
Statistics (mathematics)	365	229	136	37.3
Ocean/marine sciences	174	105	69	39.7
Oceanography, chemical and physical	70	39	31	44.3
Ocean/marine sciences, aggregated	104	66	38	36.5
Physics	1,871	1,504	363	19.4
Acoustics, optics/phototonics	175	143	31	17.7
Applied physics	139	117	22	15.8
Atomic physics, polymer physics	135	111	24	17.8
Biophysics (physics)	130	93	37	28.5
Condensed matter/low temperature physics	388	319	69	17.8
Medical physics/radiological science	81	66	15	18.5
Nuclear physics	91	65	26	28.6
Particle (elementary) physics	284	240	44	15.5

TABLE 16. Doctorate recipients, by sex and subfield of study: 2012

Subfield of study	Total ^a	Male	Female	% female
Plasma/fusion physics	66	60	6	9.1
Physics, general	242	188	51	21.1
Physics, other	140	102	38	27.1
Psychology and social sciences	8,353	3,488	4,861	58.2
Psychology	3,614	1,047	2,566	71.0
Behavioral analysis	43	16	27	62.8
Clinical psychology	1,229	288	941	76.6
Cognitive psychology and psycholinguistics	198	90	108	54.5
Counseling	395	118	277	70.1
Developmental and child psychology	206	30	176	85.4
Educational psychology (psychology)	67	17	50	74.6
Experimental psychology	134	57	77	57.5
Family psychology	42	8	34	81.0
Health and medical psychology	45	12	33	73.3
Human development and family studies	137	24	113	82.5
Industrial and organizational psychology	222	93	129	58.1
Neuropsychology/physiological psychology	101	36	65	64.4
School psychology (psychology)	120	13	107	89.2
Social psychology	245	90	155	63.3
Psychology, general	229	79	149	65.1
Psychology, aggregated	201	76	125	62.2
Social sciences	4,739	2,441	2,295	48.4
Anthropology	546	186	360	65.9
Economics, econometrics	1,195	813	381	31.9
Natural resource/environmental economics (social sciences)	48	27	21	43.8
Political science and government	726	422	303	41.7
Sociology	631	230	400	63.4
Other social sciences	1,593	763	830	52.1
Area/ethnic/cultural/gender studies	115	38	77	67.0
Criminal justice and corrections	80	42	38	47.5
Criminology	86	33	53	61.6
Demography, gerontology, statistics, urban affairs, social sciences-general, social sciences-other	272	101	171	62.9
Geography	271	164	107	39.5
International relations/affairs	123	73	50	40.7
Linguistics	260	117	143	55.0
Public policy analysis	265	128	137	51.7
Urban/city, community and regional planning	121	67	54	44.6
Engineering	8,427	6,527	1,883	22.3
Aerospace, aeronautical, and astronautical engineering	307	268	39	12.7
Chemical engineering	840	583	256	30.5
Civil engineering	496	389	106	21.4
Electrical, electronics, and communications engineering	1,943	1,598	337	17.3
Industrial and manufacturing engineering	227	165	62	27.3
Materials science engineering	743	556	184	24.8
Mechanical engineering	1,221	1,042	178	14.6
Other engineering	2,650	1,926	721	27.2
Bioengineering and biomedical engineering	940	606	334	35.5
Computer engineering	406	350	55	13.5
Environmental health engineering	214	124	89	41.6
Nuclear engineering	101	86	15	14.9
Structural engineering	81	69	12	14.8
Systems engineering	83	59	24	28.9
Transportation and highway engineering	76	61	15	19.7
Other engineering, aggregated	749	571	177	23.6

TABLE 16. Doctorate recipients, by sex and subfield of study: 2012

Subfield of study	Total ^a	Male	Female	% female
Education	4,802	1,501	3,297	68.7
Education administration	1,055	390	662	62.7
Educational administration and supervision	221	89	131	59.3
Education and human resource studies/development	76	28	48	63.2
Educational leadership	671	246	423	63.0
Urban education and leadership	87	27	60	69.0
Education research	2,571	761	1,810	70.4
Counseling education/counseling and guidance	222	51	171	77.0
Curriculum and instruction	581	165	416	71.6
Educational assessment/testing/measurement	58	22	36	62.1
Educational policy analysis	159	46	113	71.1
Educational psychology (education)	305	79	226	74.1
Educational statistics/research methods	70	27	43	61.4
Educational/instructional technology, media design	194	85	109	56.2
Higher education/evaluation and research	445	160	285	64.0
International education	52	10	42	80.8
School psychology (education)	117	29	88	75.2
Social/philosophical foundations of education	100	45	55	55.0
Special education	268	42	226	84.3
Teacher education	156	43	113	72.4
Adult and continuing teacher education	50	15	35	70.0
Pre-elementary and elementary teacher education	68	12	56	82.4
Secondary teacher education	38	16	22	57.9
Teaching fields	755	229	525	69.5
Art education	36	8	28	77.8
Foreign languages education	60	15	45	75.0
Health education	35	10	25	71.4
Literacy and reading education	123	16	106	86.2
Mathematics education	114	32	82	71.9
Music education	69	33	36	52.2
Physical education and coaching	38	21	17	44.7
Science education	110	34	76	69.1
Teaching fields, aggregated	170	60	110	64.7
Other education	265	78	187	70.6
Education, general	122	44	78	63.9
Education, other	143	34	109	76.2
Humanities	5,503	2,654	2,847	51.7
Foreign languages and literature	685	238	447	65.3
French, Italian	173	62	111	64.2
German	90	32	58	64.4
Latin American	57	16	41	71.9
Spanish	205	64	141	68.8
Other aggregated languages	160	64	96	60.0
History	1,089	603	486	44.6
American history (U.S. and Canada)	441	244	197	44.7
Asian history	73	46	27	37.0
European history	187	99	88	47.1
History, science and technology and society	49	29	20	40.8
Latin American history	64	31	33	51.6
Middle/Near East studies	60	33	27	45.0
History, general	93	53	40	43.0
History, aggregated	122	68	54	44.3
Letters	1,638	659	978	59.7
American literature (U.S. and Canada)	408	186	222	54.4

TABLE 16. Doctorate recipients, by sex and subfield of study: 2012

Subfield of study	Total ^a	Male	Female	% female
Classics	101	53	48	47.5
Comparative literature	201	75	126	62.7
English language	158	64	94	59.5
English literature (British and Commonwealth)	423	157	266	62.9
Rhetoric and composition	153	53	100	65.4
Speech and rhetorical studies	53	18	35	66.0
Letters, aggregated	141	53	87	61.7
Other humanities	2,091	1,154	936	44.8
American/U.S. studies	121	47	74	61.2
Archaeology	79	41	38	48.1
Art history/criticism/conservation	227	52	175	77.1
Drama/theater arts	111	45	66	59.5
Film/cinema/video studies	62	35	27	43.5
Music	67	39	28	41.8
Musicology/ethnomusicology	138	59	79	57.2
Music performance	113	57	56	49.6
Music theory and composition	95	75	20	21.1
Philosophy, ethics	527	385	141	26.8
Religion/religious studies, Jewish/Judaic studies	307	206	101	32.9
Other humanities, aggregated	244	113	131	53.7
Other ^b	2,926	1,496	1,425	48.7
Business management/administration	1,411	839	569	40.3
Accounting	176	91	84	47.7
Banking/financial services, finance	233	181	52	22.3
Business administration and management	224	154	69	30.8
Human resources development	44	15	29	65.9
Management information systems/business statistics	102	71	31	30.4
Marketing management and research	175	87	88	50.3
Organizational behavior	164	63	101	61.6
Other aggregated business fields	293	177	115	39.2
Communication	597	244	352	59.0
Communication research	126	49	77	61.1
Mass communication/media studies	200	86	113	56.5
Communication, general	117	45	72	61.5
Communication, aggregated	154	64	90	58.4
Non-S&E fields not elsewhere classified	918	413	504	54.9
Architecture/environmental design	110	62	48	43.6
Family/consumer science/human science	50	8	42	84.0
Parks/sports/recreation/leisure/fitness	61	35	26	42.6
Public administration	132	73	59	44.7
Social work	280	69	210	75.0
Theology/religious education	184	135	49	26.6
Fields not elsewhere classified, aggregated	101	31	70	69.3

S&E = science and engineering.

^a Includes 56 respondents who did not report sex.^b Non-science and engineering fields.

NOTE: See appendix A, table A-6, for listing of major fields and their constituent subfields.

SOURCE: NSF, NIH, USED, USDA, NEH, NASA, Survey of Earned Doctorates, 2012.